

REMARKS

35 U.S.C. § 103

Claims 1-7, 9, 10, 12,14, and 15 were rejected as being obvious over Morgenstern in view of McCabe. The applicant respectfully disagrees for the following reasons.

Summary

In general, claim 1 of the present invention is directed to:

- i. calculating a current estimated ETo (evapotranspiration); and
- ii. calculating and/or modifying a run time schedule to take advantage of the current estimated ETo calculation.

Neither Morgenstern, McCabe, nor Oliver teach or suggest calculating a current estimated ETo, and any reference lacking a current estimated ETo would necessarily lack element ii because that element is based on the current estimated ETo.

Detailed Analysis

In particular, claim 1 expressly recites application of “a current value for an environmental factor to the regression model”. Morgenstern may calculate ETo, but Morgenstern fails to teach or suggest the claim element recited above. In addressing this claim element, the Examiner has referred the Applicant to column 2, line 47 through column 3, line 34. A close look at this language, however, reveals that wind speed and temperature are used to either allow the irrigation to be applied or prevent it from being applied. There is absolutely no teaching or suggestion for applying a current value for an environmental factor to a regression model. In furtherance of this point, the Applicant refers the Examiner to language in the Abstract section of Morgenstern which states, “interrupts a sprinkler system when ambient temperature is below thirty six degrees and when wind velocity is above ten miles per hour”.

Claim 1 also requires that the current value for an environmental factor be applied to the regression model “to estimate a current evapotranspiration rate (estimated ETo)”. Since Morgenstern does not teach or suggest application of a current value to a regression model (as

discussed above), there cannot be a teaching or suggestion which would include use of such a regression model to estimate a current ETo. Taking this logic one step further, since there is no estimated current ETo, there cannot be a teaching or suggestion to use an estimated ETo "to affect an irrigation schedule".

McCabe involves use of crop coefficients and soil moisture. There is no teaching or suggestion of a current estimated ETo. In fact, McCabe does not even address a regression relationship between an environmental factor and evapotranspiration.

Turning now to Oliver, the '302 patent teaches that meteorological data and ETo are used to compute a watering factor (not a current estimated ETo value). The watering factor is the difference between a watering schedule and a new watering schedule and may be used to modify the watering schedule if appropriate.

First, Oliver does not teach or suggest a regression model as defined by the specification. A regression model is defined as being "based upon a comparison of historical ETo values against corresponding historical environmental values".

Additionally, Oliver lacks suggestion or teaching of a current estimated ETo. A current estimated ETo is derived from application of a current value for an environmental factor to the regression model (a comparison of historical ETo values against corresponding historical environmental values). Even if historical environmental values were considered to be equivalent to historical meteorological data, there is no suggestion of comparison of historical meteorological data with historical ETo values or application of a current environmental factor to a regression model.

Based on the failure of the references, even in combination, to teach or suggest all of the claimed elements of independent claim 1, all rejections are respectfully traversed.

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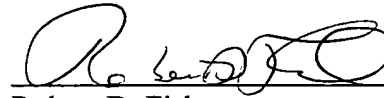
The Applicant requests a telephone interview with the Examiner. Please call me at 714-641-3433 at your earliest convenience.

Respectfully submitted,

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